Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] What is claimed is:

1.A portable communications device comprising:

a cover comprising magnetic media disposed on the cover, the magnetic media emitting a magnetic flux for identifying the cover; and

a transceiver module, the cover being detachably installed on the transceiver module, the transceiver module comprising:

a magnetic sensor for measuring the magnetic flux emitted by the magnetic media and generating a corresponding output signal; and

a control circuit for receiving the output signal from the magnetic sensor and determining an identification of the cover based on the received output signal.

[c2] 2.The portable communications device of claim 1 further comprising a database stored in a memory for storing Man-Machine Interface (MMI) attributes corresponding to the identification of the cover.

[c3] 3.The portable communications device of claim 1 wherein the cover comprises a front cover and a rear cover, and the magnetic media is disposed on an inner

side of the front cover.

[c4] 4.The portable communications device of claim 1 wherein the magnetic sensor is disposed on a printed circuit board (PCB) of the transceiver module.

[c5] 5.The portable communications device of claim 1 wherein the output signal generated by the magnetic sensor is an analog output voltage.

[c6] 6.The portable communications device of claim 5 wherein the magnetic sensor is a linear Hall effect sensor and the analog output voltage is directly proportional to the measured magnetic flux.

[c7] 7.The portable communications device of claim 1 wherein the magnetic media is a magnet.

[c8] 8.The portable communications device of claim 1 wherein the magnetic media is magnetic powder.

[c9] 9.The portable communications device of claim 1 being a mobile phone.

[c10] 10.A method of identifying a detachable cover of a portable communications device, the method compris-ing:

providing magnetic media disposed on the cover, the magnetic media emitting a magnetic flux for identifying

the cover;

measuring the magnetic flux emitted by the magnetic media and generating a corresponding output signal with a magnetic sensor; and

determining an identification of the cover based on the output signal.

[c11] 11.The method of claim 10 further comprising searching a database stored in a memory of the portable communications device for Man-Machine Interface (MMI) attributes corresponding to the identification of the cover and loading the MMI attributes into the portable communications device.

[c12] 12.The method of claim 10 wherein the cover comprises a front cover and a rear cover, and the magnetic media is disposed on an inner side of the front cover.

[c13] 13.The method of claim 10 further comprising disposing the magnetic sensor on a printed circuit board (PCB) of the transceiver module.

[c14] 14.The method of claim 10 wherein the output signal generated by the magnetic sensor is an analog output voltage.

[c15] 15.The method of claim 14 wherein the magnetic sensor is a linear Hall effect sensor and the analog output volt-

age is directly proportional to the measured magnetic flux.

[c16] 16.The method of claim 10 wherein the magnetic media is a magnet.

[c17] 17.The method of claim 10 wherein the magnetic media is magnetic powder.

[c18] 18.The method of claim 10 wherein the portable communications device is a mobile phone.